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CLAIMS

What is claimed is:

1. A compound lift device for controlled movement of a low-profile display comprising:

5 (a) a base unit of planar extent having a first pair of linearly extensible slides separately disposed and parallel, one each of said first pair of linearly extensible slides fastened to a flange along length of said base unit;

(b) a support unit of planar extent having a second pair of linearly extensible slides separately disposed and parallel, one each of said second pair of linearly extensible slides fastened to a flange along length of said support unit, said support unit having at
10 least two support elements adjustably fastened thereto so as to facilitate secured attachment of said low-profile display;

(c) an intermediate unit of planar extent having a first pair of pulleys attached at one end and a second pair of pulleys attached at another end, said first pair of linearly extensible slides and said second pair of linearly extensible slides separately fastened to
15 said intermediate unit so as to allow movement between said intermediate unit and said base unit and between said support unit and said intermediate unit, said intermediate unit sufficiently stiff so as to resist deflection of said intermediate unit during extension and retraction;

(d) a reversible motor fastened to said base unit and directly coupled to a drive
20 screw, said drive screw secured to said base unit so as to allow its rotation, said drive screw contacting said intermediate unit thereby communicating linear movement to said
22 intermediate unit via rotation of said drive screw, said intermediate unit extending and

1 retracting with respect to said base unit, said intermediate unit disposed between said base
unit and said support unit when said compound lift device is retracted; and

(e) two cables separately disposed about and parallel to said drive screw, said
two cables each having two cable ends fastened to said base unit, said two cables fastened
5 along its length to said support unit, said two cables slidably disposed about said
intermediate unit via said first pair of pulleys and said second pair of pulleys, said two
cables imparting likewise movement to said support unit when said intermediate unit is
extended and retracted.

2. The compound lift device of claim 1, further comprising:

10 (f) a limit switch fastened to said base unit, said limit switch electrically
connected to said reversible motor or a controller so as to control function, said limit
switch having a rod extending along said base unit, parallel to said drive screw, and
attached to said base unit in a movable fashion, said rod having a lower stop to stop and
reverse said motor when said compound lift device is retracted and an upper stop to stop
15 and reverse said motor when said compound lift device is extended.

3. The compound lift device of claim 1, further comprising:

(f) a rotary motion sensor adjacent to said drive screw and communicating
with said controller so as to stop and reverse said motor based on rotational history of said
drive screw.

20 4. A method for extending and retracting a compound lift device comprising the steps of:

(a) coupling rotational motion of a drive screw to a first extensible unit so as
22 to cause linear movement of said first extensible unit; and

1 (b) coupling linear movement of said first extensible unit to a second
extensible unit in a likewise linear fashion via a cable-pulley arrangement.

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